

REMARKS

THE CLAIM AMENDMENTS

Applicants have amended claims 97, 99 and 112-113. Following entry of this amendment, claims 97, 99, and 105-120 will be pending.

Applicants have amended claims 97, 99, 112 and 113 to specify that neuronal survival is mediated by expression of N-CAM or L1. Support for this amendment may be found, for example, at specification page 58, line 31 to page 59, line 6; page 70, line 16 to page 72, line 4; and page 76, lines 1-33.

Applicants have amended claims 97 and 112 to correct a typographical error.

None of the amendments introduces any new matter.

THE REJECTIONS

35 U.S.C. §112, First Paragraph - Enablement

The Examiner has rejected claims 97, 99, and 105-120 under 35 U.S.C. §112, first paragraph, for lack of enablement. The Examiner states that the specification, while being enabling for "a method of decreasing neuronal cell death associated with neuropathy or injury in which neuronal survival is mediated by expression of N-CAM or L1 by administering to a subject with a morphogen comprising a dimeric protein having fragments of amino acids 38-139 and 43-139 of SEQ ID NO:5 with homology as recited in claim 97," does not provide enablement for a method for decreasing neuronal cell death associated with all forms of neuropathy or chemical or physical

injury characterized by undefined altered N-CAM or L1 isoform expression. The Examiner contends that it is unpredictable what form of neuropathy or injury is characterized by increased or decreased N-CAM or L1 expression.

Applicants traverse. However, solely to expedite prosecution of this application, applicants have amended claims 97, 99, 112, and 113 (and therefore, claims dependent therefrom) to recite that neuronal survival is mediated by expression of N-CAM or L1. As acknowledged by the Examiner, the claims, as amended, are fully enabled by the specification. First, the specification describes at page 58, line 31 to page 59, line 6 and Example 3 on pages 70-72 the ability of morphogens to enhance neuronal cell survival. Specifically, the specification discloses that the ability of morphogens to enhance neuronal cell death indicates that they may be useful to enhance survival of neuronal cells at risk of dying, for example, to a neuropathy or chemical or mechanical trauma (see, page 71, lines 27-32). In addition to showing increased neuronal cell survival, Example 6 on pages 76-80 describes the ability of morphogens to induce N-CAM and L1 expression. Accordingly, applicants' specification provides sufficient disclosure to support the claimed method in injuries and neuropathies wherein neuronal survival is mediated by expression of N-CAM or L1. Accordingly, applicants respectfully request that the Examiner withdraw this rejection.

35 U.S.C. §112, First Paragraph – Written description

The Examiner has rejected claims 99, 105-111 and 113-120 under 35 U.S.C. §112, first paragraph, for lack of written description. The Examiner contends that the recitation of "a

chemical or physical injury characterized by altered NCAM or L1 isoform expression" is not clearly disclosed in the specification and claims as filed and is new matter.

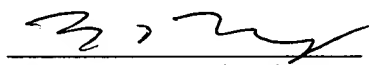
Applicants traverse. However, solely to expedite prosecution of this application, applicants have amended claims 99 and 113 (and therefore, claims dependent therefrom) to recite that neuronal survival is mediated by expression of N-CAM or L1. Support for this amendment may be found, for example, on page 58, line 31 to page 59, line 6; page 70, line 16 to page 72, line 4; and page 76, lines 1–33. Accordingly, applicants respectfully request that the Examiner withdraw this rejection.

CONCLUSION

In view of the foregoing amendments and remarks, applicants request that the Examiner reconsider and withdraw all outstanding rejections and allow the pending claims.

The Examiner is invited to telephone applicants' representatives regarding any matter that may be handled by telephone to expedite allowance of the pending claims.

Respectfully submitted,



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